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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>112857-608</b>
INTERNATIONAL APPLICATION NO. <b>PCT/JP2005/005312</b>		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/559,071</b>
INTERNATIONAL FILING DATE <b>March 16, 2005</b>		PRIORITY DATE CLAIMED <b>March 19, 2004</b>
TITLE OF INVENTION STIMULI-RESPONSIVE HYDROGEL, PRODUCTION METHOD OF STIMULI-RESPONSIVE HYDROGEL, AND POLYMER ACTUATOR USING STIMULI-RESPONSIVE HYDROGEL		
APPLICANT(S) FOR DO/EO/US <b>Hidetoshi Ito et al.</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<div style="margin-left: 20px;"><div>1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</div><div>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</div><div>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</div><div>4. <input type="checkbox"/> The US has been elected (Article 31).</div><div>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))<div style="margin-left: 20px;"><div>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</div><div>b. <input type="checkbox"/> has been communicated by the International Bureau.</div><div>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</div></div></div><div>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).<div style="margin-left: 20px;"><div>a. <input type="checkbox"/> is attached hereto.</div><div>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</div></div></div><div>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))<div style="margin-left: 20px;"><div>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</div><div>b. <input type="checkbox"/> have been communicated by the International Bureau.</div><div>c. <input checked="" type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</div><div>d. <input type="checkbox"/> have not been made and will not be made.</div></div></div><div>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</div><div>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</div><div>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</div></div> <div style="margin-left: 20px;"><b>Items 11 to 20 below concern document(s) or information included:</b><div style="margin-left: 20px;"><div>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</div><div>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</div><div>13. <input type="checkbox"/> A preliminary amendment.</div><div>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</div><div>15. <input type="checkbox"/> A substitute specification.</div><div>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</div><div>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</div><div>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</div><div>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</div></div></div>		

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/559,071</b>		INTERNATIONAL APPLICATION NO. <b>PCT/JP2005/005312</b>		ATTORNEY'S DOCKET NUMBER <b>112857-608</b>	
20. Other items or information:  <b>Submission of Search Report; Form PCT/IB/338</b>					
The following fees have been submitted				<b>CALCULATIONS      PTO USE ONLY</b>	
21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... <b>\$300</b>				\$	
22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c))				\$	
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... <b>\$0</b>					
All other situations..... <b>\$200</b>					
23. <input type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... <b>\$0</b>					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... <b>\$100</b>					
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... <b>\$400</b>					
All other situations..... <b>\$500</b>					
<b>TOTAL OF 21, 22 and 23 =</b>					
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) in an electronic medium or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is <b>\$250</b> for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round <b>up</b> to a whole number)	RATE		
- 100 =	/50 =		x <b>\$250</b>	\$	
Surcharge of <b>\$130.00</b> for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	- 20 =		x <b>\$ 50</b>	\$	
Independent claims	- 3 =		x <b>\$200</b>	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ <b>\$360</b>	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.					
<b>SUBTOTAL =</b>				\$	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property				\$	
<b>TOTAL FEES ENCLOSED =</b>				\$	
				Amount to be refunded:	\$ 0.00
				Amount to be charged	\$ 0.00

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- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-1818. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038. The PTO-2038 should only be mailed or faxed to the USPTO. However, when paying the basic national fee, the PTO-2038 may NOT be faxed to the USPTO.

**ADVISORY:** If filing by EFS-Web, do **NOT** attach the PTO-2038 form as a PDF along with your EFS-Web submission. Please be advised that this is **not** recommended and by doing so your **credit card information may be displayed via PAIR**. To protect your information, it is recommended paying fees online by using the electronic payment method.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Thomas C. Basso  
Bell, Boyd & Lloyd, LLC  
P.O. Box 1135  
Chicago, IL 60690-1135



SIGNATURE

Thomas C. Basso

NAME

46.541

REGISTRATION NUMBER

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Ito, et al.  
Appl. No.: 11/599,071  
Conf. No.: 3798  
Filed: September 19, 2006  
Title: STIMULI-RESPONSIVE HYDROGEL, PRODUCTION METHOD OF  
STIMULI-RESPONSIVE HYDROGEL, AND POLYMER ACTUATOR USING  
STIMULI-RESPONSIVE HYDROGEL.  
Art Unit: Unknown  
Examiner: Unknown  
Docket No.: 112857-608

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUBMISSION OF SEARCH REPORT**

Sir:

Submitted herewith is a copy of a search report associated with corresponding Japanese patent application, No. 2005-005312. The search report issued on October 26, 2006.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY 

Thomas C. Basso  
Reg. No. 46,541  
Customer No. 29175

Dated: December 12, 2006